

Work Order ID 86963

86963

Page 1

July-10-12 9:08:40 AM

Item ID: D3303-3

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket

Start Date: 7/10/12

Start Qty: 20.00

20

Cust Item ID:

Required Date: 8/10/12

Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 12/07/10 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3303	Rev B

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

2624 . 040

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

SMB
12.7.25

DAS
16
9-83

12/4/25

20

B12-7-24

B12-7-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86963

86963

Page 2

July-10-12 9:08:40 AM

Item ID: D3303-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bracket
 Start Date: 7/10/12 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 8/10/12 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1- Deburr2- C'sink nut plate holes as per Dwg D33033-polish waterjet marks								
140		0.00							
140	NC BRAKE								
Brake NC	Memo	0.00							
Brake NC	Form as per Dwg D3303 to fit DT9011								
150		0.00							
150	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									

DAS
16
25

12/08/21

cont
x20

SB
12/08/21

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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86963

July-10-12 9:08:40 AM

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 7/10/12 **Start Qty:** 20.00 ***20***

Cust Item ID:

Required Date: 8/10/12 **Req'd Qty:** 20.00 ***20***

Customer:

Reference:

Run Start *NR1*

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
---------	--------	-----------

**Accept
Qty**

Reject Qty

Reject
Number

**Insp.
Stamp**

160

Chemical Conversion Coat per QSI005 4.1

0.00

160

HandFinish

Memo

0.00

Hand Finishing

170

QC3- Inspect Part Finish

0.00

170

QC

Memo

0.00

Quality Control

Identify as per dwg & Stock Location: 183 0.00

180

Packaging

Memo

0.00

Packaging

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR: Yes No** **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 86963

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Page 4

July-10-12 9:08:40 AM

Item ID: D3303-3 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bracket
 Start Date: 7/10/12 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 8/10/12 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

MJ 12/08/23

mf
12-08-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

July-10-12 9:08:40 AM

Page 1

Work Order ID: 86963

Parent Item: D3303-3

Parent Item Name: Bracket

Start Date: 7/10/12

Required Date: 8/10/12

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP: A04.09.07New issueKJ/JLM
IPP Rev:B 08-05-13 add DT9011 jig DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040 2024-T3 .040 sheet		Purchased	No			100	sf	174.8112	0.2986	6.286316			

1312-7-24

Location

Loc Qty

Loc Code

MAT022

174.8111626

120605

49.6627416

121197

32.498421

122136

92.65

122136

20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	86963
Description: Head Rest		Part Number:	D3303-3
Inspection Dwg: D3303	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.850	+/-0.010	4.847	L		V B02	
4.330	+/-0.005	4.326	L		V	
0.550	+/-0.010	558	L		V	
0.260	+/-0.010	261	L		V	
3.300	+/-0.010	3.308	L		V	
1.500	+/-0.005	1.499	L		V	
0.250	+/-0.005	250	L		V	
Ø0.219	+0.005/-0.000	221	V		V	
Ø0.098	+0.005/-0.000	100	L		V	
Ø0.128	+0.005/-0.000	129	L		V	
R0.12	+/-0.030	12	>		R.G.	
2.000	+/-0.005	2.001	L		V	
1.425	+/-0.010	1.427	L		V	
8.100	+/-0.010	8.102	L		V	
1.000	+/-0.005	1.001	L		V	
0.040	+/-0.010	41	L		V	

Measured by: RB	Audited by: SMB	Prototype Approval:	N/A
Date: 12-7-24	Date: 12-7-25	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.09.08	New Issue	KJ/JLM	
B	08.05.07	Dimensions updated per Dwg Rev B	KJ/DD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

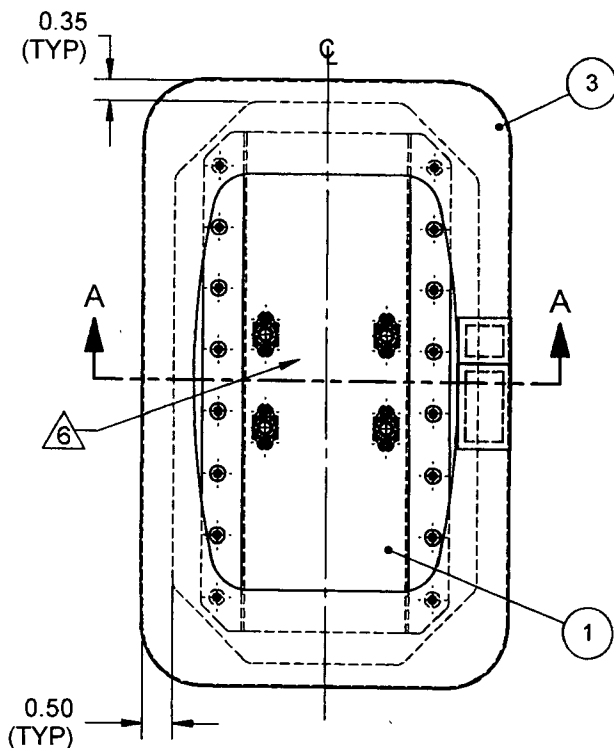
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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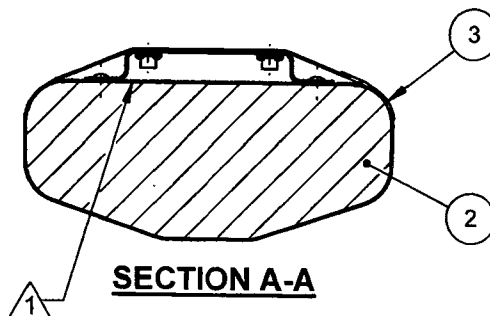
NOTE: Date & initial all entries

DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3303	REV. B SHEET 1 OF 4
DATE 06.08.17		TITLE HEAD REST SCALE 1:3	
REV A	DATE 04.08.18	DESCRIPTION NEW ISSUE	
B	06.08.17	UPDATED FLAT PATTERN TO FORM PART IN ONE OPERATION USING OFFSET DIE	



RELEASED

dc-09.19 *[Signature]***DEO ATTACHED****D3303-041 HEAD REST**

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3303-041	HEAD REST
1	1	D3303-043	BRACKET ASSEMBLY
2	1	D3305-1	FOAM
3	1	D3306-041	COVER ASSEMBLY

NOTES:

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE (0.002" TO 0.010" THICK) IN ACORDDANCE WITH MANUFACTURER'S INSTRUCTIONS
- 2) COVER HEAD REST WITH D3306-041 COVER ASSEMBLY AS SHOWN
- 3) PART IS SYMMETRICAL AT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFY AS FOLLOWS USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD, P/N D3303-041 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 210963 MLS
12/07/10

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

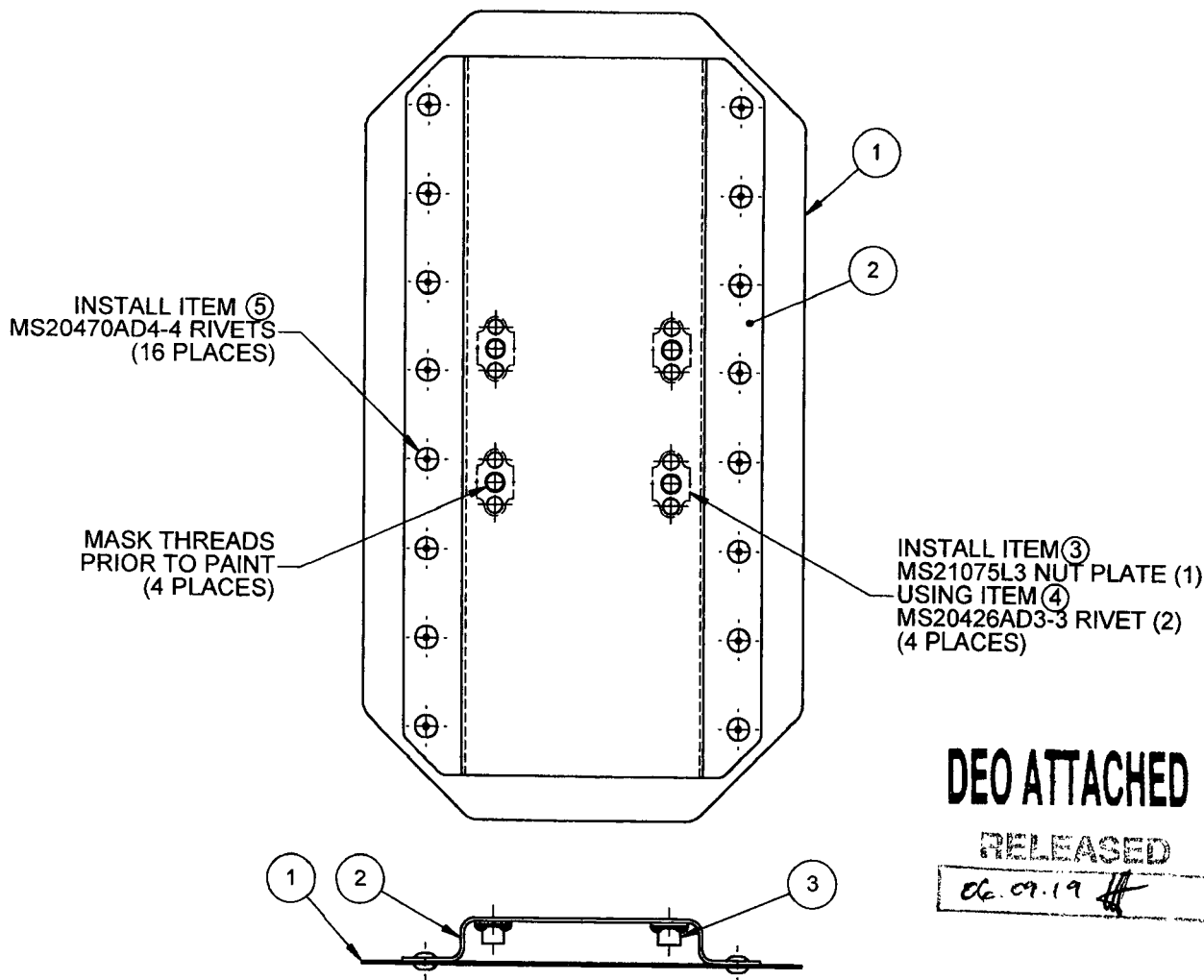
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3303	REV. B. SHEET 2 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2



DEO ATTACHED

RELEASED

06.09.19

D3303-043 BRACKET ASSEMBLY

ITEM	QTY -043	P/N	DESCRIPTION
	X	D3303-043	BRACKET ASSEMBLY
1	1	D3303-1	PLATE
2	1	D3303-3	HEAD REST
3	4	MS21075L3	NUT PLATE
4	8	MS20426AD3-3	RIVET
5	16	MS20470AD4-4	RIVET

NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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0603

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

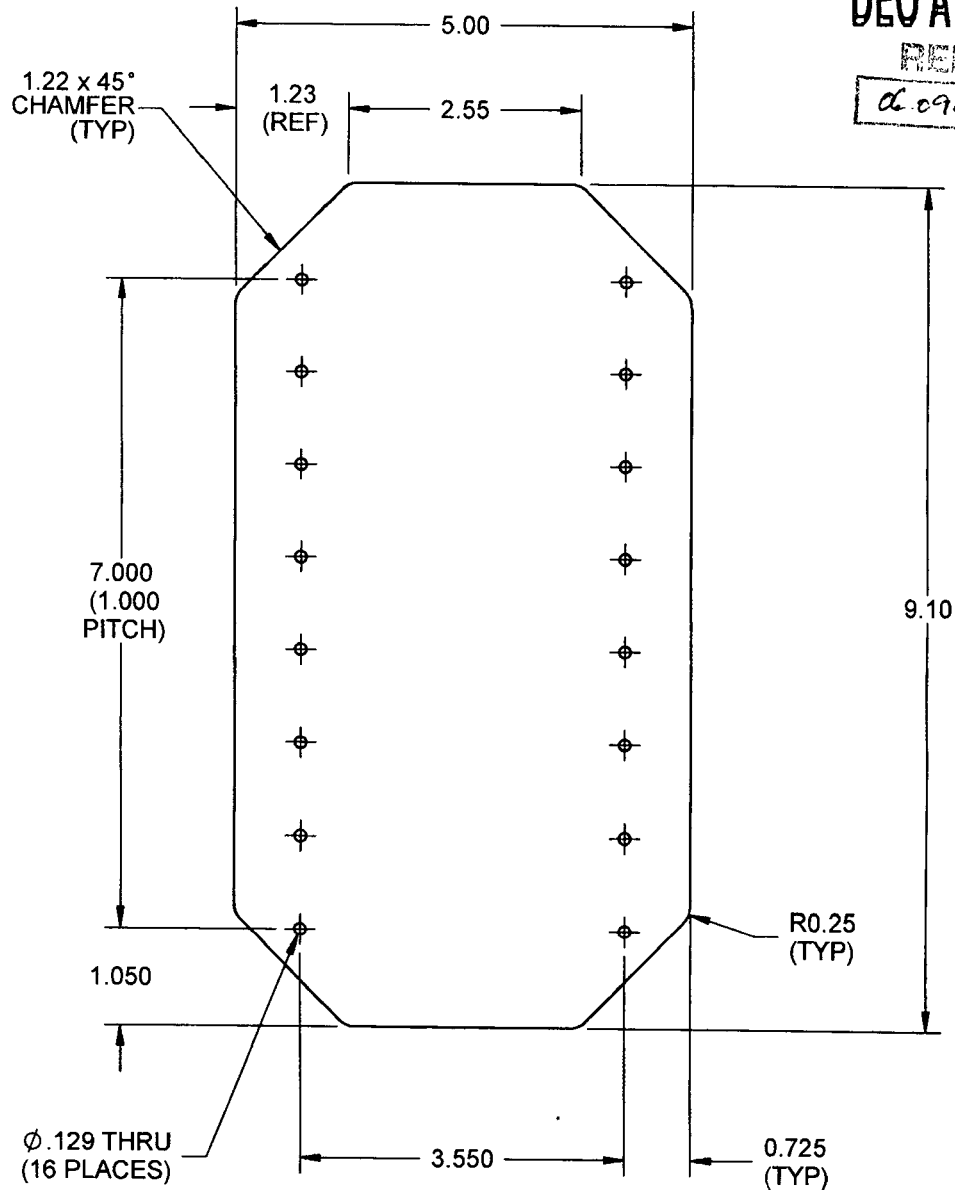
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3303	REV. B SHEET 3 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2



D3303-1 PLATE

NOTES:

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK SHEET (REF. DART SPEC. M2024T3S.032)
- 2) FINISH: CHEMICAL CONVERSION COAT AS PER DART QSI 005.4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

060903

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

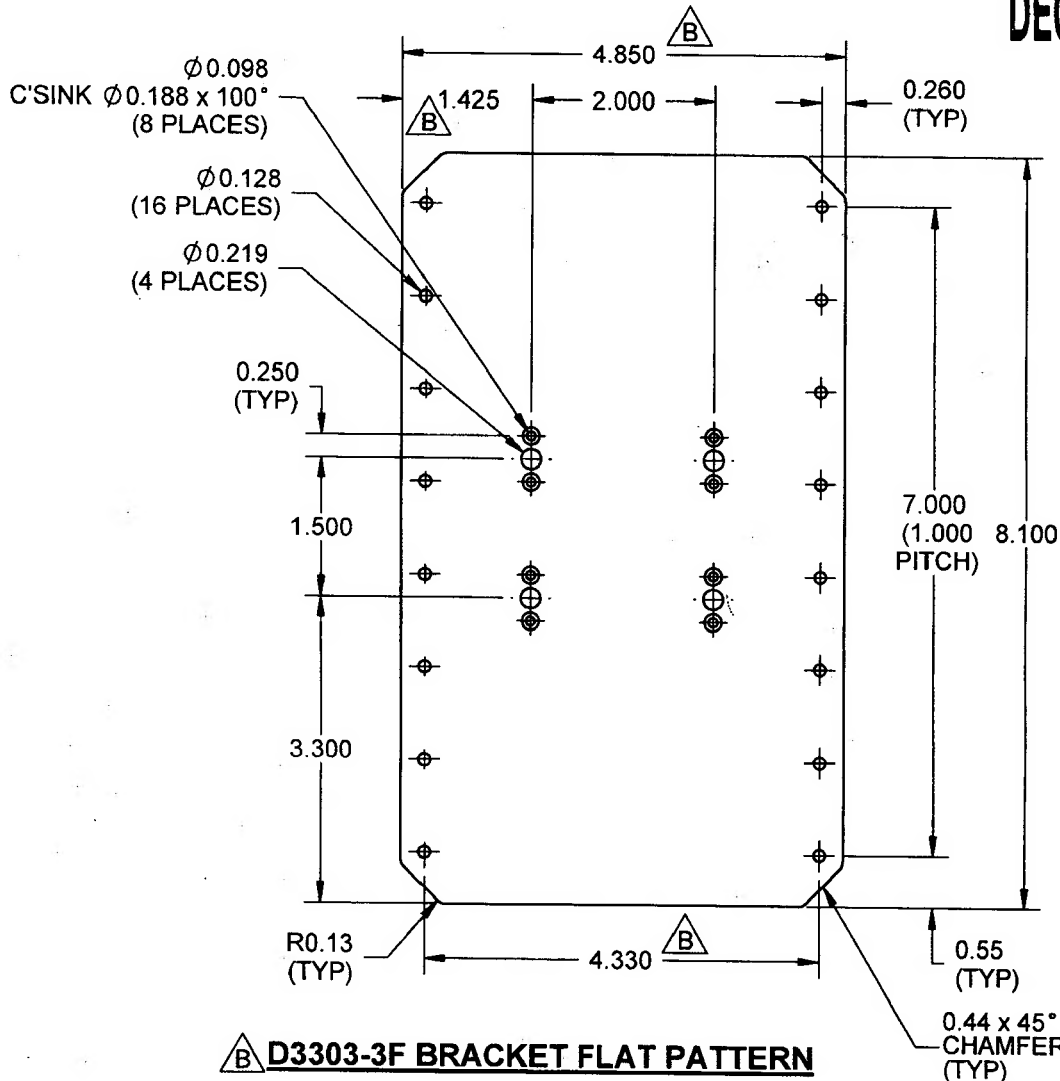
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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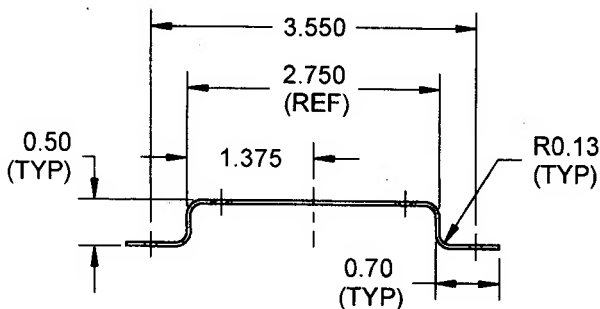


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3303	REV. B SHEET 4 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2

DEO ATTACHED



D3303-3F BRACKET FLAT PATTERN



D3303-3 BRACKET BEND DETAIL

NOTES:

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK SHEET (REF. DART SPEC. M2024T3S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT AS PER DART QSI 005.4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

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RELEASED
06.09.19

060903

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

86963

DRAWING NO. D3303	TITLE HEAD REST	REV. B	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3303-B-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED L	MFG. APPR. M	APPROVED MAD		DE APPR. H		
DATE 08.10.15	DATE 08.10.15	DATE 08/10/16	DATE 08/10/16		DATE 08/10/16		

SHEET 1 ADD 1300L ADHESIVE BY 3M TO NOTE 1 AS FOLLOWS:

IS:

NOTES:

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 OR 1300L ADHESIVE (0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

WAS:

NOTES:

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE (0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

SEE NCR 08-069 FOR FURTHER DETAILS

RELEASED
08/11/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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